

**PENGARUH *ICE MASSAGE* DAN *COLD WATER*  
*IMMERSION* TERHADAP PERCEPATAN PEMULIHAN  
PADA KELELAHAN ATLET DAYUNG**

**TESIS**

Diajukan untuk Memenuhi Sebagian dari Syarat Memperoleh Gelar Magister  
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PENGARUH *ICE MASSAGE* DAN *COLD WATER IMMERSION* TERHADAP  
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# **Pengaruh *Ice Massage* dan *Cold Water Immersion* Terhadap Percepatan Pemulihan Pada Kelelahan Atlet Dayung**

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## **Abstrak**

Latihan intensitas tinggi menyebabkan terjadinya kelelahan yang ditandai dengan meningkatnya kadar laktat darah dan persepsi nyeri. Tujuan pada penelitian ini yaitu untuk mengetahui besarnya pengaruh metode *ice massage* dan *cold water immersion* terhadap percepatan pemulihan pada kelelahan atlet dayung. Metode penelitian yang digunakan yaitu *True Experiment* dengan desain penelitian *The Randomized Pretest-Posttest Control Group Design*. Populasi dalam penelitian ini merupakan atlet pelatda dayung Jawa Barat nomor *rowing*, yang berjumlah 31 atlet. Melalui pendekatan *purposive sampling* dengan beberapa kriteria yang dibutuhkan, didapatkan sampel berjumlah 24 atlet. Dari total 24 sampel secara acak dibagi menjadi tiga kelompok, yaitu kelompok *ice massage*, kelompok *cold water immersion* dan kelompok kontrol dengan jumlah sampel tiap kelompok 8 orang. Hasil dari penelitian ini menunjukkan metode *ice massage* dan *cold water immersion* memberikan pengaruh yang signifikan terhadap percepatan pemulihan pada kelelahan atlet dayung ditinjau dari kadar laktat darah dan tes *Visual Analogue Scale* (VAS). Untuk hasil penelitian perbedaan pengaruh antara kelompok eksperimen (*ice massage* dan *cold water immersion*) dan kelompok kontrol menyatakan bahwa keduanya memberikan efek yang sama terhadap percepatan pemulihan pada kelelahan atlet dayung ditinjau dari tingkat kadar laktat dan tes VAS. Untuk penelitian selanjutnya disarankan untuk dapat menambah aspek lain yang perlu diukur sebagai indikasi kelelahan dalam percepatan pemulihan seperti status hidrasi, denyut nadi, kapasitas aerobik, dan *wellness questionnaire*.

Kata kunci : Latihan intensitas tinggi, kelelahan, *ice massage*, *cold water immersion*, pemulihan, laktat, *Visual Analog Scale* (VAS).

# **Effect of Ice Massage and Cold Water Immersion on Acceleration of Recovery in Rowing Athletes Fatigue**

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## **Abstract**

High intensity exercise causes fatigue which is characterized by increased blood lactate levels and pain perception. The purpose of this study was to determine the magnitude of the effect of the ice massage and cold water immersion methods on the acceleration of recovery in the fatigue of rowing athletes. The research method used is the True Experiment with the research design of The Randomized Pretest-Posttest Control Group Design. The population in this study were rowing number rowing athletes from West Java, which amounted to 31 athletes. Through a purposive sampling approach with some of the required criteria, a sample of 24 athletes was obtained. From a total of 24 samples randomly divided into three groups, namely the ice massage group, the cold water immersion group and the control group with 8 people as samples. The results of this study indicate methods of ice massage and cold water immersion provides significantly the impact to the acceleration of the recovery in rowing athlete fatigue in terms of lactate in the blood and test Visual Analog Scale (VAS). To research the difference effect between experimental groups (ice massage and cold water immersion) and the control group stated that both provide the same effect on acceleration recovery in rowing athlete fatigue in terms of the level of lactate levels and test the VAS. For further research, it is suggested to add other aspects that need to be measured as an indication of fatigue in accelerating recovery such as hydration status, heart rate, aerobic capacity, and wellness questions.

**Keywords :** High intensity exercise, fatigue, ice massage, cold water immersion, recovery, lactate, Visual Analog Scale (VAS).

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